

EAGLE NEST PUP PROJCT

1989 PROGRESS REPORT

EIP 89004

CLAIMS

EAGLE NEST DISCOVERY

EAGLE TREE

LUCKY LENORE

WHITEHORSE MINING DISTRICT

YUKON TERRITORY

by

O. HANSON

NOVEMBER 7, 1989

TESTING PROGRAM EAGLE NEST PUP

EVALUATION

Testing of the gravelson Eagle Nest Pup in 1989 was done on the stream area of the three claims.

In over 100 tests that were taken, rockes and gravel was screened through three sizes of screens, then panned for evaluation of the concentrates.

A one inch screen was used to get a one foot gold pan full of sand and gravel, the second was one quarter inch, the third was one eight inch.

*RESULTS

Large boulders, rockes, gravel, over 1 inch	75-78%
Concentrate, from $\frac{1}{2}$ to 1 inch	08-10%
Concentrate, from one eight to $\frac{1}{4}$ inch	02-04%
Concentrate, black sands, etc., -	01-02%

After concentration the black sand and fine sands were checked with a 30 power scope to determine the amount of gold or other values.

The black sand was consistant in all the tests and showed 5-8 colors per pan.

There was other signs of pyrites, garnets, etc., and due to the amount, no assays have been sent in for testing until further sampling can be done.

The eqipment is still on the site and as soon as the weather and funding permitts, more testing is planed

TABLE OF CONTENTS

	Page
Summary	1
Introduction.....	2
Geology.....	3
Economic Geology.....	4
Geochemistry.....	5
Geophysics.....	6
Conclusions and Recommendations.....	7

Plate 1; Livingstone Creek air strip

Plate 2; Livingstone Creek air strip

Map # 1; Contour map 105-E

Map # 2; Magnetic Survey 700 4G

Map # 3; Geology and Contour

Map # 4; Basic road map of area

Map # 5; General Information

Map # 6; Exploration Information

SUMMARY

The eagle nest pup claims, 50 air miles east of Whitehorse, on a tributary of Livingstone creek was worked during the early 1900's. Since then there was no recorded work until 1978 when they were restaked.

Testing and some exploration work has been done over the last 5 yr's. The results of the work and tests so far show that there was some mining done and there is a potential due to the location as to other producing mines in the area.

INTRODUCTION

The eagle nest pup project work was done on three claims, located above the Livingstone creek discovery claim 1000 feet to the left up the pup to the north. Claim sheet IO5E8 claim# P3738, P22677, P22743

Testing was done the full length of the area by taking samples ; panning , drilling, and stipping, trenching on the two upper claims, from july to november 1989.

Previous work was done mostly on the lower claim with a D6 , and a 931 cat backhoe .

CONCLUSIONS AND RECOMMENDATIONS

EVALUATION

The exploration this year has up to now, that the upper area is generally the same as the lower part.

There is a layer of bolders up to three feet in size approximately one to eight feet, deeper depending on the channel.

The lower claims are on a steeper grade and the area is covered by more gravel that has been washed down and covered the big bolders as well as the trees and moss.

Due to the thawing of the ground the water goes down past the bolders and underground till it is brought to the surface by frozen areas or a reef etc.

This action caused the stream to change course many times over the years and that has made it difficult to determine exactly where the original channel is (was).

In the years that the pup was worked by drifting into the hillside by thawing and timbering, the area being on a fairly good grade, drainage was not a problem.

The biggest problem was that due to the thawing of the water, there was a danger of caveins and possible flooding of the drift.

There may be some areas that were mined above ground, but to the growth of the trees and moss has covered a lot of the working and more testing is needed.

While testing and sampling a small pocket of black sand was discovered on the Axes hard rock claim; the sand was trapped in a soft shist, after concentrating -2- five gallon pails, of the concentrated sand, about 20 grams of gold (fine) was recovered, further testing did not reveal any more gold-bearing material.

Since it was close to an old cabin, the chances that it was an old cleanup area.

The other testing and sampling showed about the same over the claims.

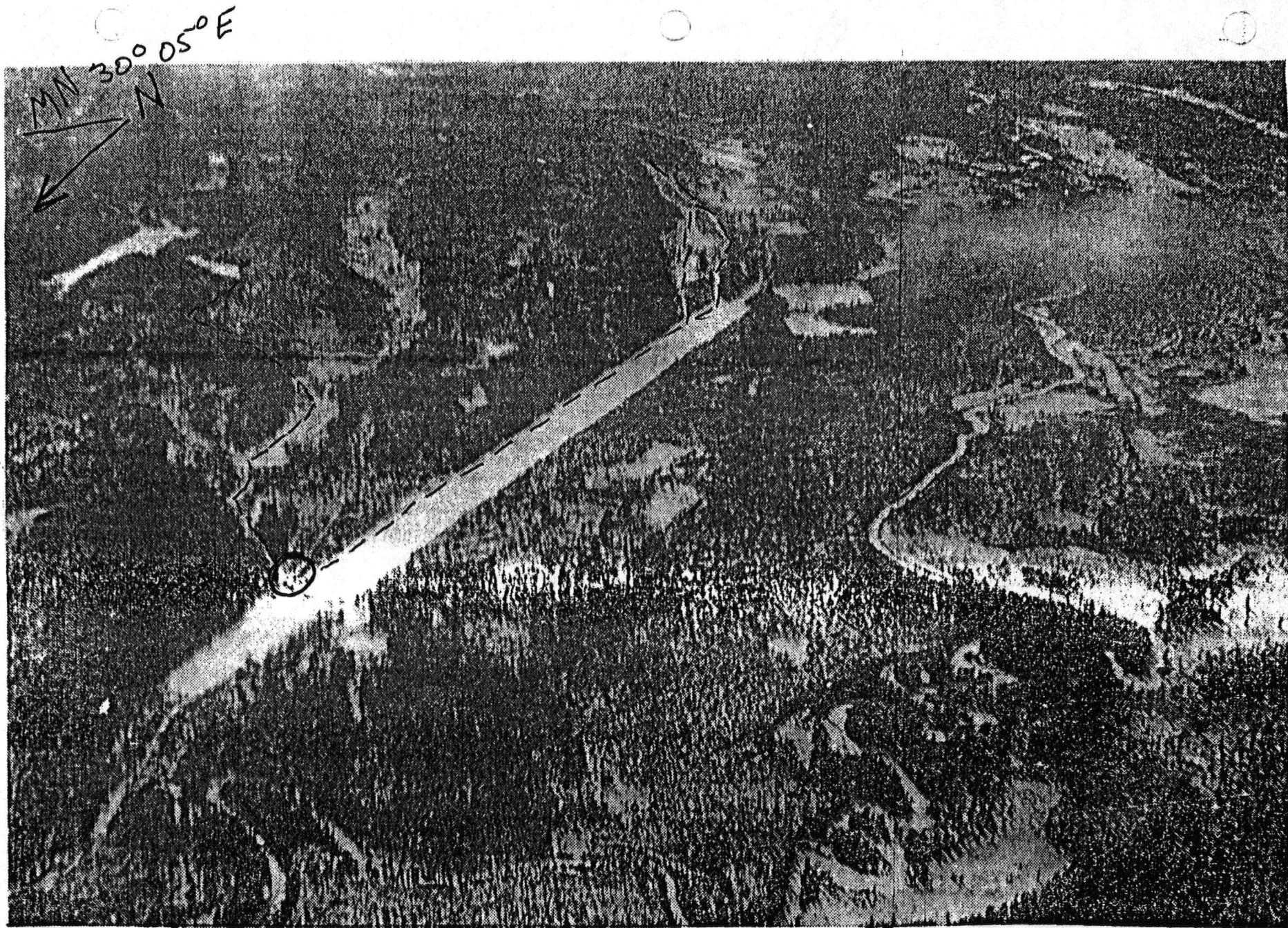


PLATE # 1

In a photo taken during an approach to the LIVINGSTONE AIR STRIP, you can see the winding path of the South Fork of the Big Salmon River to the right. LAKE CREEK is immediately left (top end) followed by SUMMITT CREEK and then by LIVINGSTONE CREEK. Leases once covered the Air Strip.

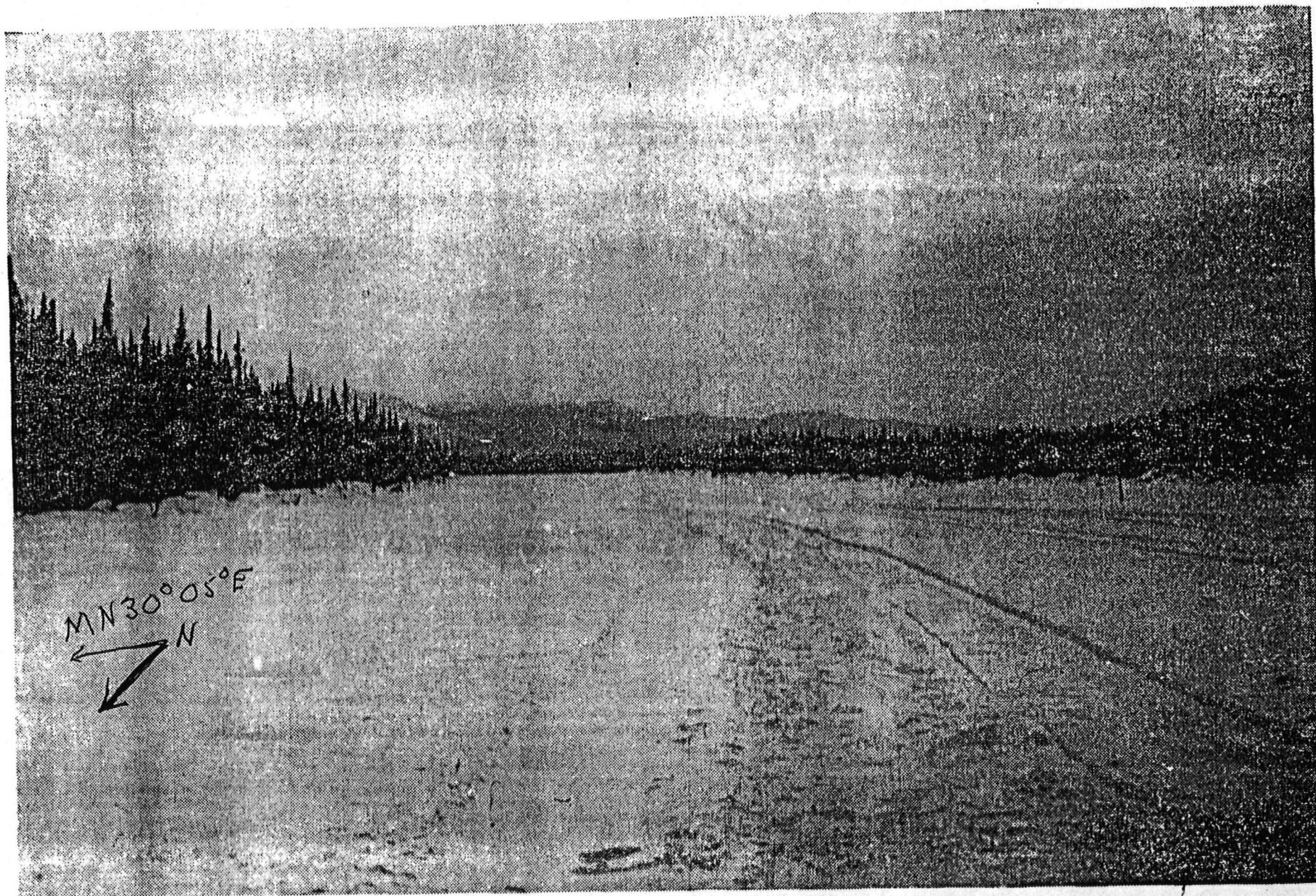
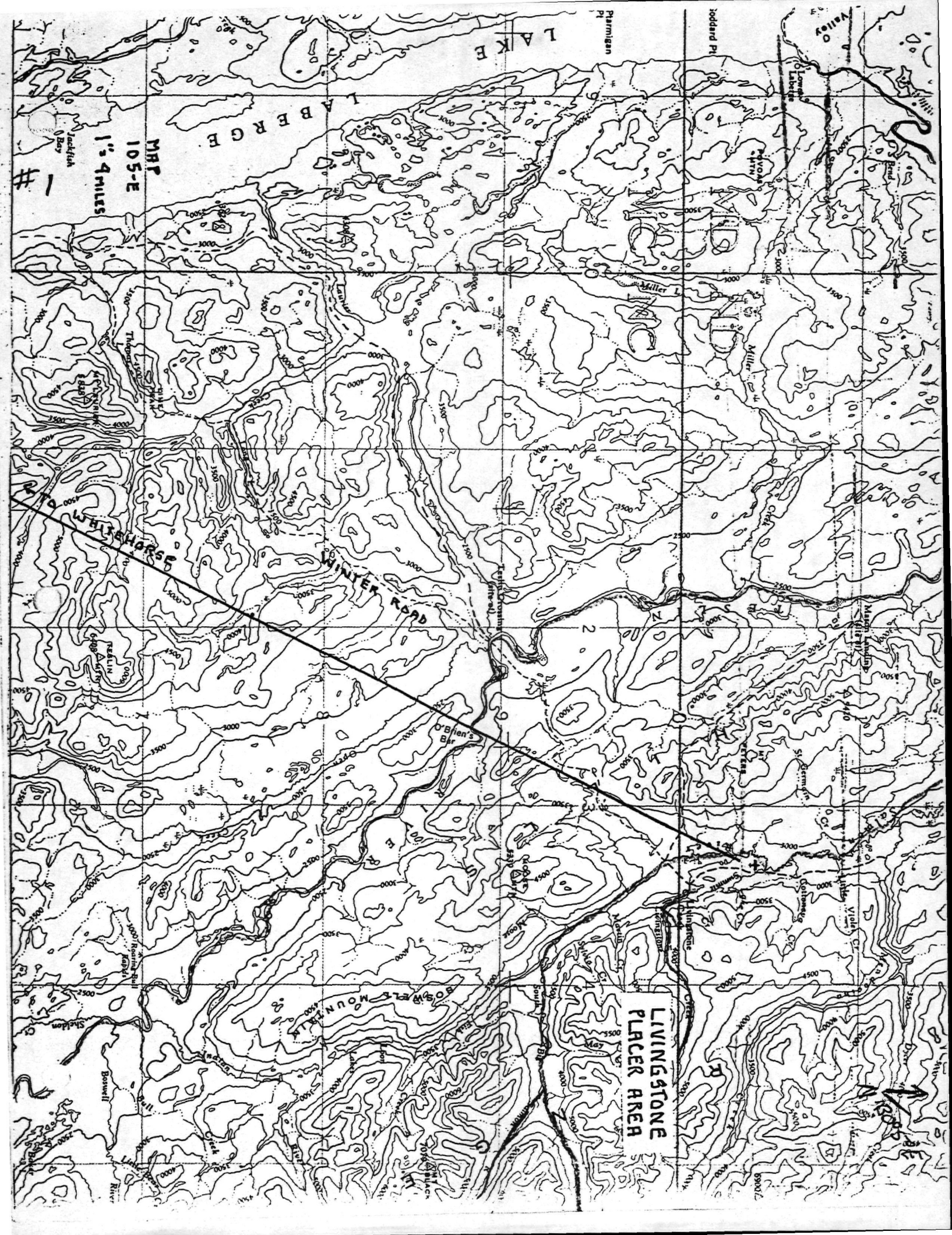


PLATE #2

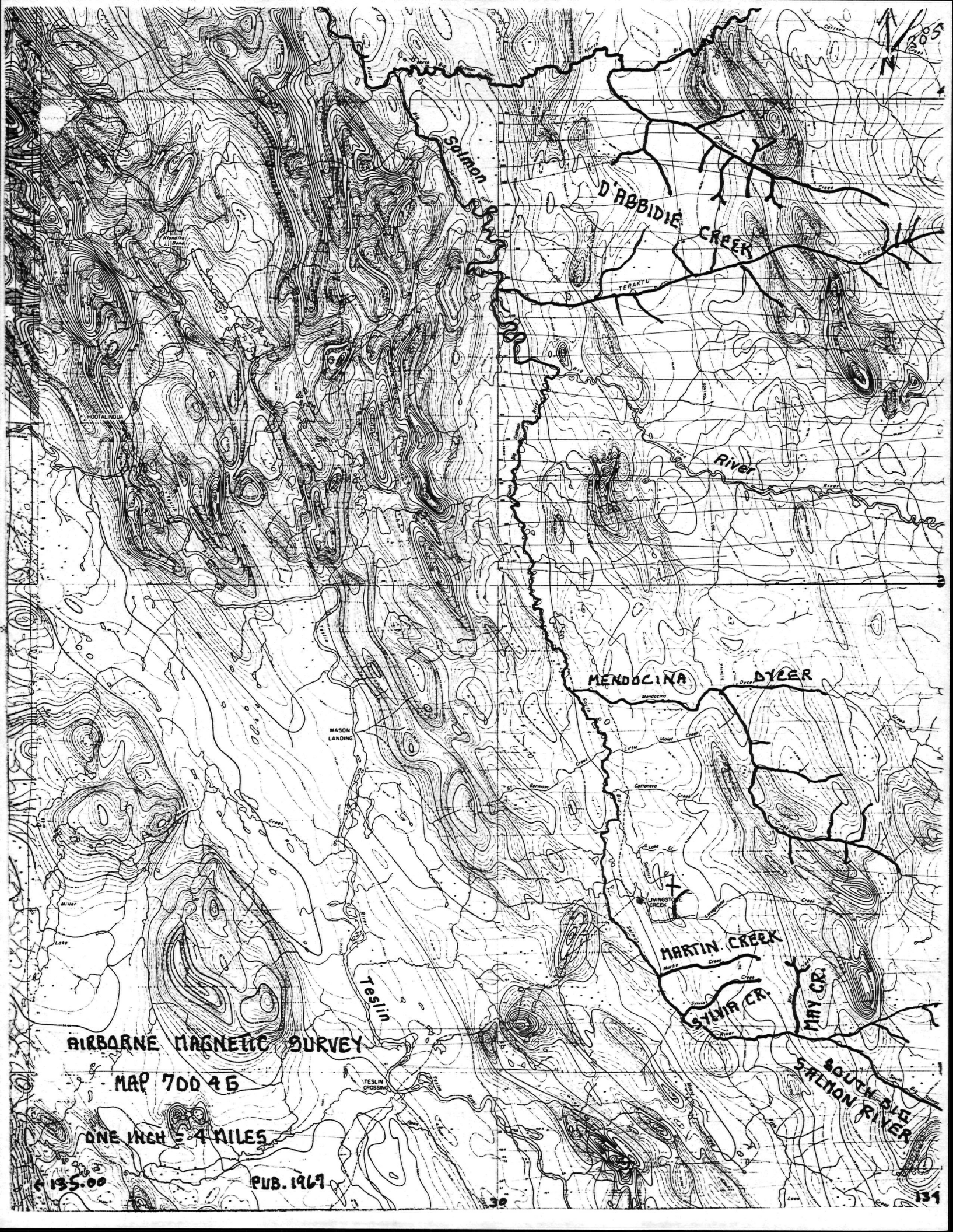
This photo of the LIVINGSTONE AIR STRIP is taken from ground level, looking south and shows the higher elevations that feed the placer creeks. Placer workings are within a mile of the air strip, with all the producing creeks to the left of this photo.



#1
MRF
105-E
1" = 4 MILES

LIVINGSTONE
PLACER AREA





705

Salmon

D'ABBIDIE CREEK

CREEK

TERARTU

River

MENDOCINA

BYLER

MASON LANDING

MARTIN CREEK

SYLVIA CR.

MAY CR.

SOUTH BAY
STRENN RIVER

AIRBORNE MAGNETIC SURVEY

MAP 700 46

ONE INCH = 4 MILES

\$ 135.00

PUB. 1961

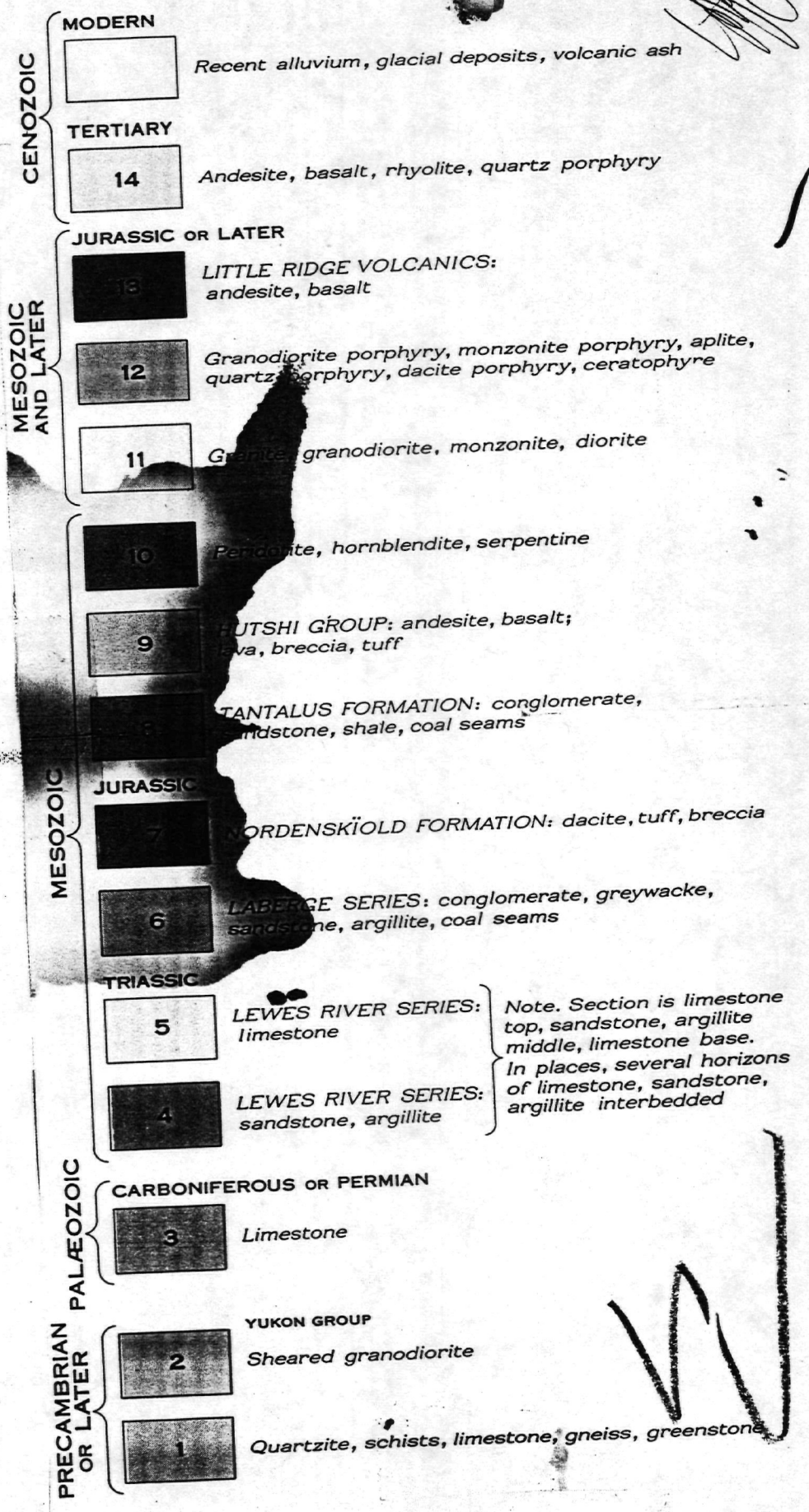
36

131



LEGEND

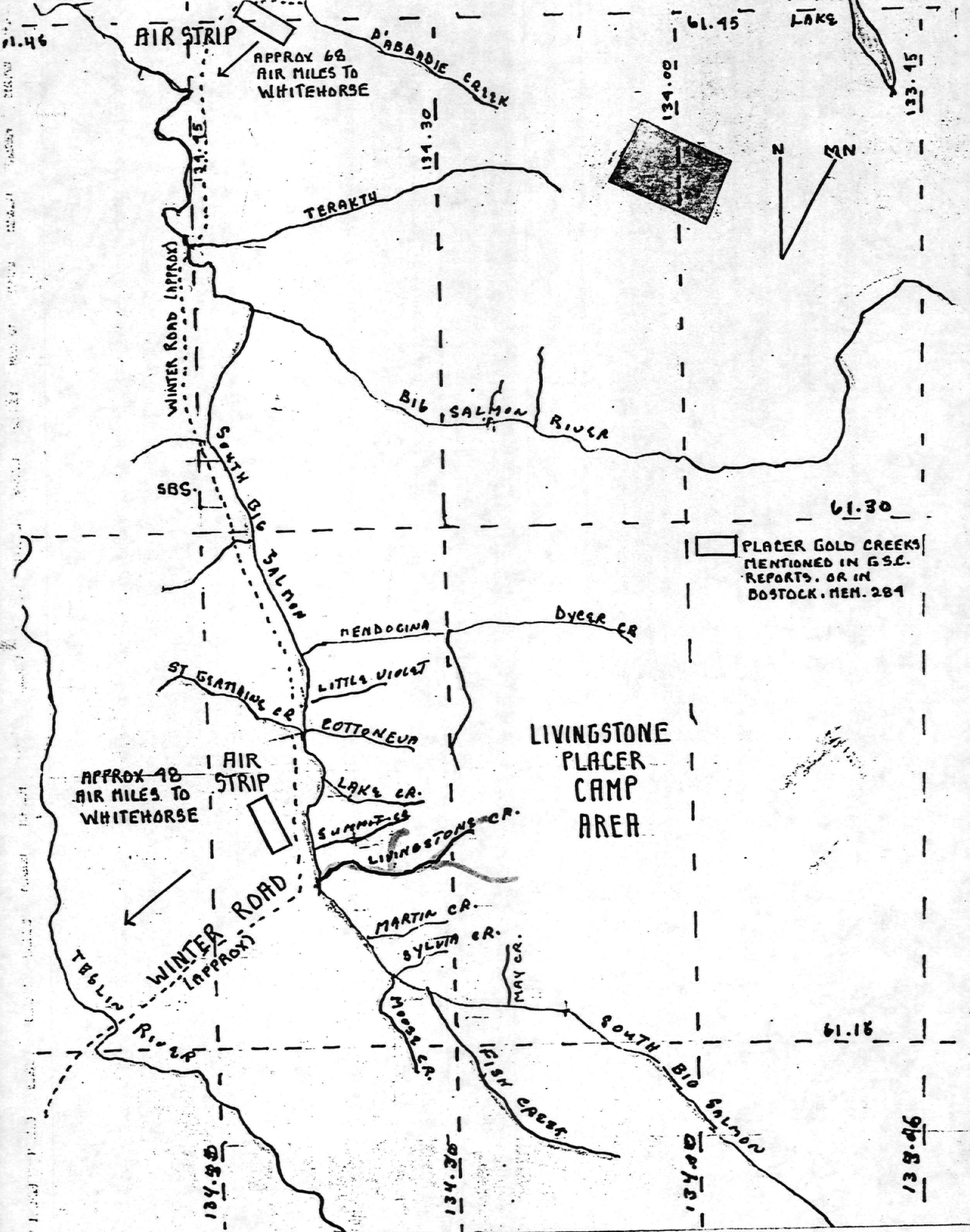
[Handwritten signature]



45'

30'

[Handwritten scribble]



APPROX 68 AIR MILES TO WHITEHORSE

61.45

134.00

133.15

134.30

61.30

PLACER GOLD CREEKS MENTIONED IN G.S.C. REPORTS. OR IN DOSTOCK. MEM. 284

APPROX 48 AIR MILES TO WHITEHORSE

LIVINGSTONE PLACER CAMP AREA

61.15

134.90

134.30

134.60

133.46

AIR STRIP, DC-3
SERVICED, ALSO 20
TWIN ISLANDER, BEAUF
OTTERS... ETC.

ROAD

OLD TOWN SITE
OF LIVINGSTONE

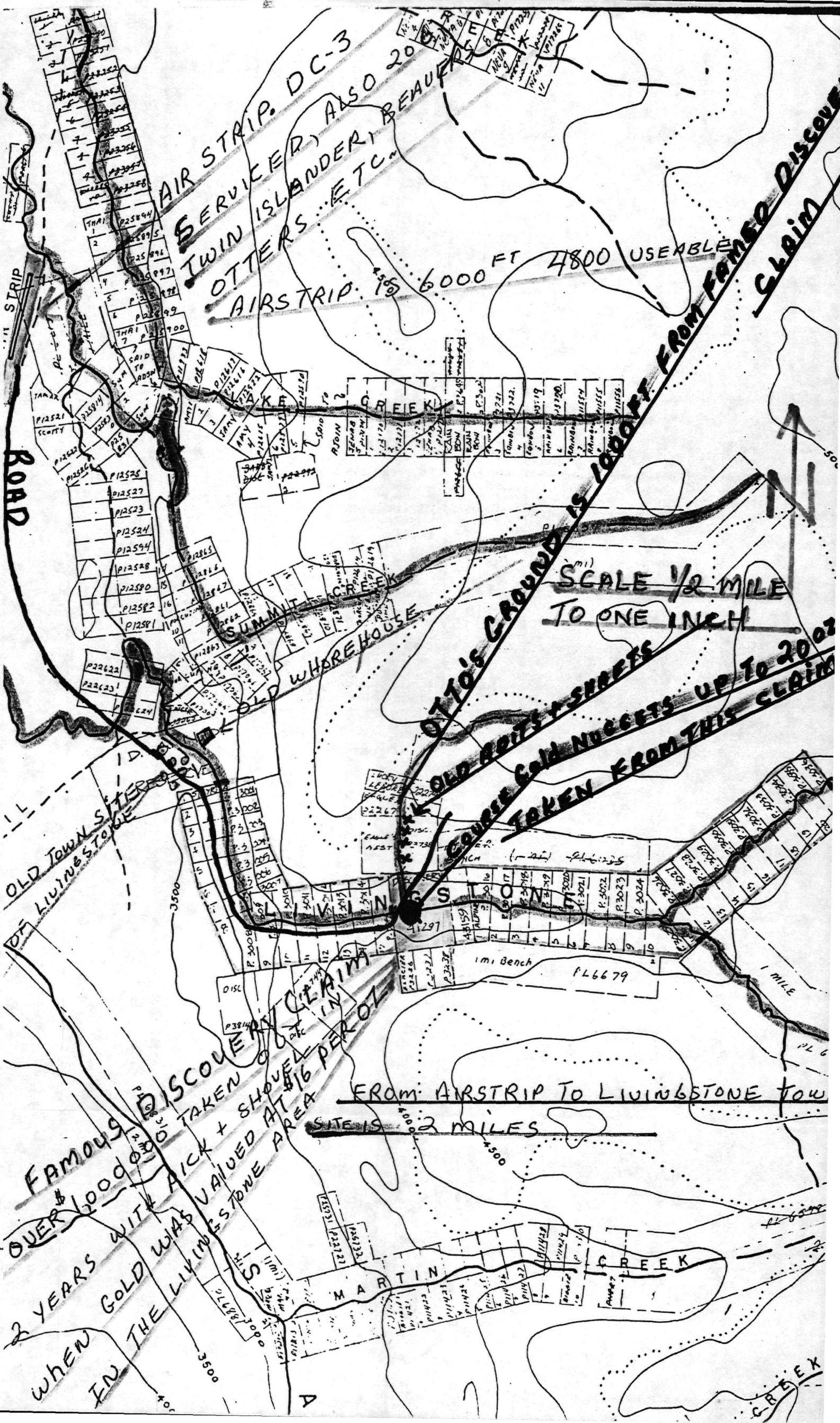
FAMOUS DISCOVERY CLAIM
OVER 1000 TONS
2 YEARS WITH PICK + SHOVEL
WHEN GOLD WAS VALUED AT \$16 PER OZ
IN THE LIVINGSTONE AREA

AIRSTRIIP: 6000 FT 4800 USEABLE

SCALE 1/2 MILE
TO ONE INCH

OTTO'S CLAIM IS LAID OFF FROM FAMOUS DISCOVERY CLAIM
OLD PITS + SHEETS UP TO 2002
GOLD TAKEN FROM THIS CLAIM

FROM AIRSTRIP TO LIVINGSTONE TOWN
SITE IS 2 MILES



← STREAM



#2 LUCKY LENORE

1989 STRIPPING & TRENCHING

1989 TEST

#1 LUCKY LENORE

1989 & DRILL STRIPPING & TRENCHING

#2 EAGLE TREE
#2 HAMMER H.R. CLAIM

1989 TEST

STORAGE SHED

#1 EAGLE TREE

+ DRILL @ OLD DRIFT
PREV. WORK

#2 EAGLE NEST.

ROAD ←

* OLD CLAIM POST.?

#1 HAMMER H.R.

#2 POST AXES H.R. CLAIM

TRENCHING
PREV. WORK.

OLD DRIFT
PREV. WORK

← OLD CHANNEL

#1 POST EAGLE NEST - 1500 FT.

← 1000 FT.
ACCESS ROAD

OLD CABIN SITE

#1 POST AXES H.R. CLAIM

LIVINGSTONE CR.

TEST DRILLING E.N.P.
SAMPLING + TEST AREA

HOLES DRILLED 3 FT APART.

← 3ft →

#1 POST EAGLE TREE
#2 POST EAGLE N.

• +3FT

• • +1FT

STORAGE
AREA.

• +2FT

• +3FT

• +2FT

• +2FT

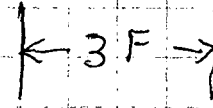
• +1FT

• +2FT

• +3FT

• +2FT

SAMPLING + TEST AREA.



+1F . . . +1FT

+1F .

+1F . . . +2FT

+2FT . . . +3FT

+2FT . . . +1FT

+3FT . . . +2FT
#1 POST LUCKY LENORE
#2 POST FAWN TREE.

+3FT . . . +2FT

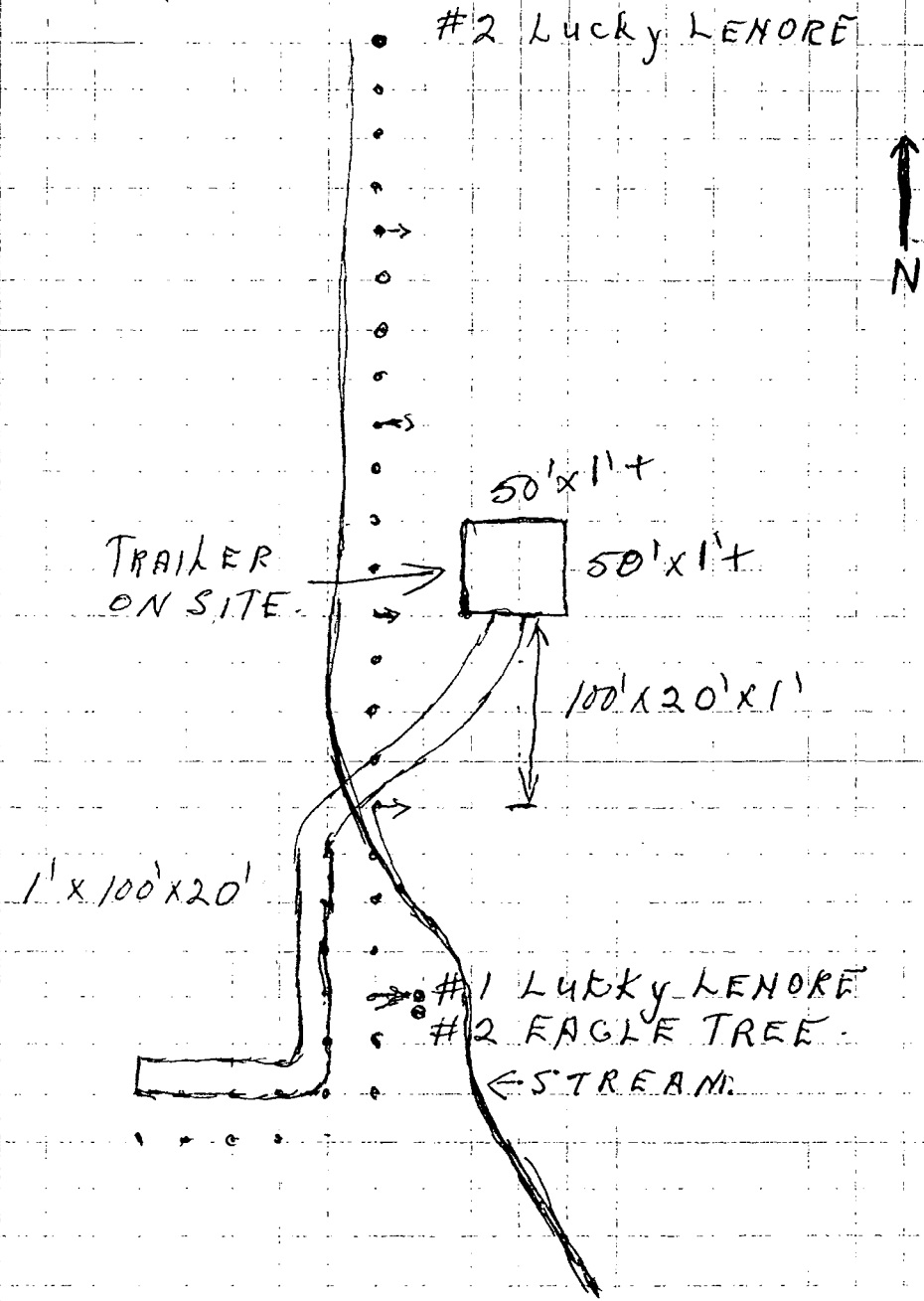
+2FT . . . +1FT

+2FT . . . +2FT

+2FT . . . +2FT

+1FT . . . +3FT

EAGLE NEST PUP SAMPLING & TEST AREA





GEOLOGICAL
SURVEY
OF
CANADA

DEPARTMENT OF MINES
AND TECHNICAL SURVEYS

MEMOIR 217

LABERGE MAP-AREA,
YUKON

H. S. Bostock and E. J. Lees

Price,



PER

\$. 9 0

Reprinted 1960

TERTIARY VOLCANIC ROCKS

In addition to the Little Ridge volcanic rocks that may be of Tertiary age, several considerable areas in the northeast and southeast corners of Laberge district are underlain by volcanic rocks believed to be of Tertiary age. One area in the northeast is on a ridge extending southeasterly from Mount Lokken and is occupied by andesite, dacite, rhyolite, and porphyritic lavas and dykes. The rocks are pale green and brown to nearly white. They are surrounded and underlain by Yukon group rocks which as seen in a creek valley are cut by dykes composed of representatives of most if not all of the flow rocks. Two other Tertiary areas occur a few miles to the east and are formed of lava flows. One of these areas is Solitary Mountain, which viewed from the east is seen to be made up of lava flows dipping gently northeast and in thickness amounting to 1,500 feet or more. They are dark brown and blue-black andesites and basalts with red, vesicular upper parts. In places they exhibit columnar jointing. They rest on a moderately even surface of Yukon group rocks. The third area of volcanic rocks is on the south side of Solitary Mountain, where a thin sheet of lava forms a cap on a broad hill top.

A large number of dykes of white to grey rhyolite, quartz porphyry, dacite porphyry, and andesite, as well as green, glassy lava, cut the granite of Rangifer Mountain. Though these dyke rocks are on the whole rather more acid than the lavas of the several areas to the north, they presumably are closely related to them. The lavas are lithologically identical with the Carmacks volcanics,¹ and like them are considered to be of Miocene age or older.

Two areas of Tertiary volcanic rocks occur in the southeast corner of the district. One area, lying between Boswell and Indian Rivers, is occupied by dense, dark brown, amygdaloidal basalt. In the second area, lying east of Baker Lake, are outcrops of black, dense basalt and porphyritic dacite with a dense groundmass. The lowest dacite flows hold a few pebbles of granite. The lavas of both these southern areas are also correlated with the Carmacks volcanics.

UNCONSOLIDATED SUPERFICIAL DEPOSITS

In a number of creeks on the west flank of Big Salmon Mountains rusty gravels have been found resting on bedrock decomposed to a depth of several inches, and overlain by boulder clay, glacial gravels, or recent stream gravels. The pebbles in the pre-Glacial gravels are entirely of local bedrock. They are angular or slightly rounded, are rarely over 12 inches long, and most of them are partly decomposed. The old gravels were seen in the upper part of D'Abbadie Creek and in a number of creeks near Livingstone, as on Lake Creek where in the base of a placer working they are 6 to 8 feet thick.

The widespread glacial deposits have been referred to in an earlier chapter. Of the post-Glacial deposits, the most noticeable is a deposit of white, fine, volcanic ash. On comparatively level stretches of ground it forms a persistent layer 3 to 6 inches thick lying at or close to the surface. Capps² has shown that a layer of volcanic ash on White River, Alaska, may be about 1,400 years old. The ash in Laberge district is presumably of the same age.

¹ Bostock, H. S.: Geol. Surv., Canada, Mem. 189, pp. 40 and 43.

² Capps, S. R.: U.S. Geol. Surv., Prof. Paper 170-A.

CHAPTER IV
ECONOMIC GEOLOGY
INTRODUCTION

The only mineral production of Laberge map-area has been from the gold placers, of which those of Livingstone camp were the most important. Very little effort has been spent searching for lode deposits although general geological conditions, especially in the area occupied by Yukon group rocks, do not seem unfavourable to their presence. As already stated, coal is reported to occur in the Tantalus formation on Claire Creek, and in all probability is present in areas of these rocks northeast and east of Big Salmon. It is not unlikely that coal also occurs in some areas of the Laberge series, which is coal-bearing in adjoining districts. A good grade of bituminous coal is mined from the Tantalus formation at Carmacks and it is to be expected that this formation in the Laberge map-area will yield similar grades.¹

GOLD PLACERS

The first discovery in Yukon of paying gold placers was made in 1881 in Laberge map-area when a party of four miners having descended Lewes River as far as the mouth of Big Salmon River, ascended the latter river and found gold in paying quantities in some of the river bars.² In the spring of 1886 Cassiar bar on Lewes River, a few miles above the mouth of Big Salmon River, was discovered. It was reported to have yielded, in some cases, at the rate of \$30 a day a man, and gold valued at many thousands of dollars was obtained from it, chiefly in 1886. In 1887 Dawson pointed out³ that on Lewes River, bars holding gold in paying quantities had been found only below Hootalinqua, that the best bars were within a distance of 70 miles, and that Cassiar bar was the richest. According to reports by prospectors, many bars along Lewes River below Hootalinqua yielded as much as \$10 a day a man. Prior to 1887, gold had also been found on bars on Teslin River. After the discovery of gold on Fortymile River, most of the miners left Laberge map-area.

In 1898 when McConnell ascended Big Salmon River he found a few unexperienced miners on that river⁴ and was informed that coarse gold occurred on lower reaches of the river, but was unable to verify this report. He stated that a number of bars on Lewes River below Big Salmon were worked successfully during the period of low water in years preceding 1898, and that in 1898 some work was done on a few bars on Teslin River but that the results were not very satisfactory.

In 1900 an attempt was made to dredge Cassiar bar. About 50,000 cubic yards of gravel was washed and the yield was reported to average

¹ Bostock, H. S.: Carmacks District; Geol. Surv., Canada, Mem. 189, pp. 58-62.

² Dawson, G. M.: Geol. Surv., Canada, Ann. Rept. 1887-88, pt. B, pp. 150-151.

³ Op. cit.

⁴ McConnell, R. G.: Geol. Surv., Canada, Sum. Rept. 1898, pp. 49, 51.

5 cents a cubic yard. The dredge was then taken to the Klondike, and since that time the river bars have not received much attention. The richest bars appear to have been on Lewes River between a point 6 or 7 miles above Cassiar bar and a point about the same distance below Big Salmon. In recent years, after the river begins to drop in August, two or three placer miners have usually worked on the bars in this stretch. A bar, sometimes termed Lower Cassiar bar, 4 or 5 miles above Big Salmon, and another, 3 to 4 miles below the same place, have received the most attention. The gold occurs as fine dust. It is notable that the best paying river bars on Lewes and Big Salmon Rivers are located in the path of the glacial ice that moved northwesterly across Livingstone placer gold camp.

In 1898 Livingstone placer camp on South Big Salmon River was discovered, and in the first decade of the century became a booming camp. No official record of the gold production is available, but the camp is believed to have produced more than \$1,000,000 in gold. Placer mining has been carried on in this camp every year since its discovery, but in the "twenties" production fell very low. In 1930 there was a revival of interest in the camp that has led to an increase in output during the last few years.

Livingstone camp has been described by McConnell, Cairnes, Cockfield, and Bostock.¹ The following account is based on these reports and information obtained in 1935 by the junior author (E. J. Lees).

The camp consists of ten creeks tributary to South Big Salmon River along a stretch of about 18 miles. Nine of these creeks flow from the east across Yukon group rocks; one only comes from the west, from an area of Mesozoic strata.

Livingstone Creek has been by far the most important creek in the camp. Within Big Salmon Mountains it flows westerly, but where it enters the valley of South Big Salmon River it turns north and follows a narrow valley, continuing northward along the edge of the main valley for 2 miles before it bends westward again to the river. Where the creek enters this northward trending valley it is about 15 feet wide, and its length above this point is about 6 miles. From its head it flows for about 3 miles in a shallow, U-shaped valley with a gradient of about 100 feet a mile. Below this stretch the valley assumes a V-shape and narrows to a canyon for the last three-quarters of a mile before the creek turns north. The gradient of the creek increases, reaching a maximum of about 500 feet a mile in the canyon. The floor in the canyon and in the narrower part of the valley above is 50 to 100 feet wide.

The canyon walls are of rock except close to the head of the canyon where the south wall is of sand, gravel, and boulder clay, with large boulders filling an old channel. The floor of the old channel is a few feet higher than the floor of the present channel, but the gradient of the old channel is lower than that of the present stream, and half a mile or so up stream the old channel is 40 feet below and more than 1,000 feet south of the present channel, a ridge of bedrock rising between them.

Gold was first discovered in the canyon, Discovery claim being close to its head. Very little gold was found in the creek above the canyon.

¹ McConnell, R. G.: Geol. Surv., Canada, Sum. Rept. 1900.

Cairnes, D. D.: Geol. Surv., Canada, Sum. Rept. 1907.

Cockfield, W. E.: Geol. Surv., Canada, Sum. Rept. 1930, pt. A.

Bostock, H. S.: Geol. Surv., Canada, Sum. Repts. 1931, 1932, 1933, and 1934, pt. A.

The gold lay on bedrock and in crevices in it. The gravel in the canyon rarely exceeded 3 feet in depth and in places bedrock was bare. The steep grade of the creek and the shallowness of the gravels made the ground easily workable and the canyon claims were soon worked out.

In 1905 or 1906 the old channel was discovered and activities renewed. A layer of rusty gravel of local rocks formed the base of the unconsolidated materials filling the old channel, and in this layer was a paystreak averaging about 30 feet in width and 2 feet in depth. The first claims along the old channel were worked separately by driving adits from the present channel. This method in the case of the claims higher up the valley necessitated long adits through the ridge of bedrock bounding the old channel and inclined shafts at their inner ends where they reached the old channel. This method of operating the claims led to difficulties in draining the workings (they lay below the level of the present channel), and work on the upper claims stopped until finally the workings were connected and the water allowed to drain through them. There then followed a second revival of activity. As the old channel was followed upwards, the gold is said to have become finer and scarcer, rich patches such as were present in the lower part did not occur, and the gravels could no longer be worked at a profit. Finally, an attempt was made to work these claims by hydraulicking the whole of the materials filling the old channel, but the great depth of frozen materials, the presence of many boulders, and doubts as to the returns to be won, led to the abandonment of the attempt soon after it had begun.

Some distance up the present creek channel, at a point abreast of the higher workings in the old, buried channel, a second buried channel is reported to have been discovered on the north side of the creek. An adit was run along it, with what results are not known, but as there was little gold in the creek below it, it probably did not contain a rich paystreak.

According to McConnell, the gold found on Livingstone Creek was coarse, and he states that a third of that obtained from Discovery claim consisted of nuggets over an ounce in weight. The largest nugget was valued at \$304 and the second largest at \$295, the gold being valued at \$16 to the ounce, the ordinary price of placer gold at that time although the assay value was stated to average \$18.20. A few nuggets had rough surfaces and included fragments of quartz, but as a rule they were smooth. Discovery claim is stated to have yielded \$11,000 in 1900. Cairnes, writing in 1907, says that the claims on the old channel had produced, on the average, about \$25,000 each. He stated that in 1906 the total production was about \$90,000, and he estimated it would be more than \$100,000 in 1907. Much magnetite in grains and coarse lumps, native copper, garnet, and cinnabar accompanied the gold.

The gravels that lay at the base of the materials filling the buried channel and that carried the paystreak were probably of pre-Glacial origin. The overlying materials were of Glacial origin. After the ice disappeared, Livingstone Creek in re-excavating its bed followed a new course for some distance above the canyon, and the pre-Glacial stream gravels with their gold content were, along this stretch, preserved. Downwards from about the head of the canyon, the present stream followed the course of the pre-Glacial stream; the glacial filling and gravels were largely removed, but the gold, or most of it, remained.

lie close to the surface, the old workings consist of a network of adits burrowed irregularly into and along the old, buried channel, leaving intervening patches of gravel untouched.

From about 1915 to 1930 the creek was abandoned. In 1930 M. T. Kerruish commenced work on the creek and up to 1935 he had washed some 30,000 cubic yards with a small hydraulic plant. The work has been done some distance above Discovery claim where he has hydraulicked the old channel, washing out some of the old workings and following the old channel upstream with a broad cut. The gold in the pre-Glacial gravels is fairly coarse and smooth, but that in the overlying glacial deposits is finer and yellow and some of it occurs with white quartz in irregular grains.

Cottoneva Creek, the next creek north of Lake Creek, is considerably larger than either Lake or Summit Creeks. A mile above where it enters the main valley, it flows through a canyon half a mile long. Above the canyon, the valley is wide with gently sloping sides. The gold-bearing gravels as compared with those of the southern creeks lie deeper and include a larger quantity of coarse materials, and these conditions combined with those resulting from the comparatively gentle gradient of the valley make it difficult to work the gravels. Though the first discovery of gold was made on Cottoneva Creek, the creek received little attention during the earlier days of the camp. Later, considerable work was done on it. Much hydraulic and other equipment was installed though little was accomplished. In the last few years two or three miners have worked on the creek with considerable success.

Little Violet Creek, the next creek north of Cottoneva Creek, has not, so far as known, attracted much attention, but one or two miners have worked on it from time to time. The creek valley is narrow and steep and where it joins the main river valley the gradient increases. Work done has been mainly above the steepest stretch. Rusty gravels like those on Lake Creek are present. The flow of water is small and many boulders are present.

Mendocina Creek, the northernmost and largest in the camp, and its tributary, Dycer Creek, have been prospected from time to time and gold has been found. It is reported that the gravels are deeply buried, unfrozen, and hold many boulders.

St. Germain Creek flows from the west and joins South Big Salmon River between Cottoneva and Little Violet Creeks. It was staked in the early days of the camp, but with what results is unknown.

Martin, Sylvia, and May Creeks join South Big Salmon River above Livingstone Creek. Work has been done on all, but with what results is unknown. Old sluice-boxes seen on May Creek indicate that a serious attempt was made to work this creek. In 1934 and 1935 two miners were working on Martin Creek.

A number of other creeks, in addition to those of Livingstone camp, are known to carry gold. All lie in the eastern part of the map-area, in the part underlain by Yukon group rocks. Some years ago a little coarse gold was found on a northern creek, probably Illusion Creek. A little gold was also found on Walsh Creek. At about the same time placer gold was discovered on D'Abbadie Creek and this creek was prospected in many places, some small exposures of rusty gravels were seen and

over

are believed to be pre-Glacial. In recent years some gold has been recovered from D'Abbadie Creek. In the southeast corner of Laberge map-area, gold has been found on Little Bear Creek. This creek was prospected in 1932 and 1935.

All the streams on which placer gold has been found, with the exception of St. Germain Creek, flow across Yukon group rocks. The gold on St. Germain Creek was found near its mouth, very close to the area of Yukon group rocks, and may have come from the area of these rocks. Thus the known distribution of the placer gold supports the belief that the source of the gold lies in the area of the Yukon group rocks. On some of the gold-bearing creeks quartz veins are conspicuous, but it is not known if the quartz veins contributed the gold or any part of it. The gold-bearing gravels on several of the creeks appear to be of pre-Glacial age and it seems reasonable to assume that practically all the placer gold was produced during a long period of pre-Glacial (or inter-Glacial) weathering and accumulation. The original, pre-Glacial gold-bearing stream gravels were liable to destruction by the ice-sheets and glaciers of the Glacial period. Such of the pre-Glacial gravels as had accumulated in deep, narrow valleys running across (approximately northeast-southwest) the direction of movement (approximately northwest) of the ice-sheet had a chance of not being destroyed by the moving ice. Pre-Glacial gravels remaining in the higher valleys would in all probability be destroyed by the valley glaciers that developed at the close of the Glacial period. Pre-Glacial gravels remaining in the lower valleys might remain because the lower valleys were not invaded by valley glaciers. The remnants of the pre-Glacial gold-bearing gravels were deeply buried beneath glacial materials that doubtless largely filled the valleys at the close of the Glacial period. Since then the streams, in the process of re-excavating their courses, have in places uncovered or partly uncovered the old gravels, and have in places largely destroyed them and produced new placers. The conclusion is that gold-bearing gravels may be expected in parts of creeks in the area of Yukon group rocks, the parts being such as are relatively low-lying, narrow, deep, and running along a northeast-southwest direction.

LODE DEPOSITS

Very little effort has been devoted to the search for lode deposits in Laberge map-area. It is believed that the fewness of the discoveries so far made is not necessarily an indication that lode deposits are lacking. Many large and small bodies of intrusive rocks of acid and intermediate composition are exposed in different parts of the map-area, and many of them are of types with which mineral deposits are associated in other regions.

Quartz veins occur in several of the valleys near Livingstone and north of Big Salmon River. From time to time it has been reported that a quartz vein in the Livingstone area has been found to carry important amounts of gold, but in most, if not all, cases later sampling has failed to confirm the earlier reports.

In 1933 a trapper reported finding a vein of considerable size northwest of Hootalinqua. A sample of the vein material consisted of approximately equal amounts of quartz and pyrite.

